

## WEST Search History





DATE: Thursday, March 03, 2005

| Hide?                    | <u>Set</u><br><u>Name</u> | <u>Query</u>   | <u>Hit</u><br><u>Count</u> |
|--------------------------|---------------------------|--|----------------------------|
|                          |                           | <i>DB=PGPB; PLUR=YES; OP=OR</i>  |                            |
| <input type="checkbox"/> | L12                       | ((absorb or absorbed or absorbing or absorption) with (\$serum or \$sera)) same (affinity with chromatograph\$)                | 18                         |
|                          |                           | <i>DB=USPT; PLUR=YES; OP=OR</i>  |                            |
| <input type="checkbox"/> | L11                       | phage with display and L10   | 5                          |
| <input type="checkbox"/> | L10                       | ((absorb or absorbed or absorbing or absorption) with (\$serum or \$sera)) same (affinity with chromatograph\$)                | 58                         |
|                          |                           | <i>DB=PGPB,USPT; PLUR=YES; OP=OR</i>   |                            |
| <input type="checkbox"/> | L9                        | affinity with chromatograph\$ and L8   | 105                        |
| <input type="checkbox"/> | L8                        | ((absorb or absorbed or absorbing or absorption) with (\$serum or \$sera)) and (phage with display)                            | 134                        |
| <input type="checkbox"/> | L7                        | ((absorb or absorbed or absorbing or absorption) with (\$serum or \$sera)) same (phage with display)                           | 8                          |
| <input type="checkbox"/> | L6                        | affinity with chromatograph\$ and L4   | 841                        |
| <input type="checkbox"/> | L5                        | ((absorb or absorbed or absorbing or absorption) with (\$serum or \$sera or antibody or antibodies)) same (phage with display) | 9                          |
| <input type="checkbox"/> | L4                        | ((absorb or absorbed or absorbing or absorption) with (\$serum or \$sera or antibody or antibodies)) and (phage with display)  | 976                        |
| <input type="checkbox"/> | L3                        | affinity with chromatograph\$ and L2   | 952                        |
| <input type="checkbox"/> | L2                        | (absorb\$ with (\$serum or \$sera or antibody or antibodies)) and (phage with display)   | 1129                       |
| <input type="checkbox"/> | L1                        | (absorb\$ with (\$serum or \$sera or antibody or antibodies)) same (phage with display)  | 11                         |

END OF SEARCH HISTORY

Connecting via Winsock to STN

Welcome to STN International! Enter x:x

LOGINID:SSSPTA1639MLS

PASSWORD:

TERMINAL (ENTER 1, 2, 3, OR ?):2

\* \* \* \* \* Welcome to STN International \* \* \* \* \*

|              |    |        |  |
|--------------|----|--------|--|
| NEWS         | 1  |        | Web Page URLs for STN Seminar Schedule - N. America  |
| NEWS         | 2  |        | "Ask CAS" for self-help around the clock   |
| NEWS         | 3  | SEP 01 | New pricing for the Save Answers for SciFinder Wizard within STN Express with Discover!  |
| NEWS         | 4  | OCT 28 | KOREAPAT now available on STN  |
| NEWS         | 5  | NOV 30 | PHAR reloaded with additional data   |
| NEWS         | 6  | DEC 01 | LISA now available on STN  |
| NEWS         | 7  | DEC 09 | 12 databases to be removed from STN on December 31, 2004   |
| NEWS         | 8  | DEC 15 | MEDLINE update schedule for December 2004  |
| NEWS         | 9  | DEC 17 | ELCOM reloaded; updating to resume; current-awareness alerts (SDIs) affected   |
| NEWS         | 10 | DEC 17 | COMPUAB reloaded; updating to resume; current-awareness alerts (SDIs) affected   |
| NEWS         | 11 | DEC 17 | SOLIDSTATE reloaded; updating to resume; current-awareness alerts (SDIs) affected  |
| NEWS         | 12 | DEC 17 | CERAB reloaded; updating to resume; current-awareness alerts (SDIs) affected   |
| NEWS         | 13 | DEC 17 | THREE NEW FIELDS ADDED TO IFIPAT/IFIUDB/IFICDB   |
| NEWS         | 14 | DEC 30 | EPFULL: New patent full text database to be available on STN   |
| NEWS         | 15 | DEC 30 | CAPLUS - PATENT COVERAGE EXPANDED  |
| NEWS         | 16 | JAN 03 | No connect-hour charges in EPPFULL during January and February 2005  |
| NEWS         | 17 | FEB 25 | CA/CAPLUS - Russian Agency for Patents and Trademarks (ROSPATENT) added to list of core patent offices covered   |
| NEWS         | 18 | FEB 10 | STN Patent Forums to be held in March 2005   |
| NEWS         | 19 | FEB 16 | STN User Update to be held in conjunction with the 229th ACS National Meeting on March 13, 2005  |
| NEWS         | 20 | FEB 28 | PATDPAFULL - New display fields provide for legal status data from INPADOC   |
| NEWS         | 21 | FEB 28 | BABS - Current-awareness alerts (SDIs) available   |
| NEWS         | 22 | FEB 28 | MEDLINE/LMEDLINE reloaded  |
| NEWS         | 23 | MAR 02 | GBFULL: New full-text patent database on STN   |
| NEWS         | 24 | MAR 03 | REGISTRY/ZREGISTRY - Sequence annotations enhanced   |
| NEWS EXPRESS |    |        | JANUARY 10 CURRENT WINDOWS VERSION IS V7.01a, CURRENT MACINTOSH VERSION IS V6.0c(ENG) AND V6.0Jc(JP), AND CURRENT DISCOVER FILE IS DATED 10 JANUARY 2005 |
| NEWS HOURS   |    |        | STN Operating Hours Plus Help Desk Availability  |
| NEWS INTER   |    |        | General Internet Information   |
| NEWS LOGIN   |    |        | Welcome Banner and News Items  |
| NEWS PHONE   |    |        | Direct Dial and Telecommunication Network Access to STN  |
| NEWS WWW     |    |        | CAS World Wide Web Site (general information)  |

Enter NEWS followed by the item number or name to see news on that specific topic.

All use of STN is subject to the provisions of the STN Customer agreement. Please note that this agreement limits use to scientific research. Use for software development or design or implementation of commercial gateways or other similar uses is prohibited and may result in loss of user privileges and other penalties.

\* \* \* \* \* STN Columbus \* \* \* \* \*

FILE 'HOME' ENTERED AT 11:22:27 ON 03 MAR 2005

=> fil medline biosis caplus embase wpids

COST IN U.S. DOLLARS

SINCE FILE

TOTAL

ENTRY

SESSION

FULL ESTIMATED COST

0.21

0.21

FILE 'MEDLINE' ENTERED AT 11:23:00 ON 03 MAR 2005

FILE 'BIOSIS' ENTERED AT 11:23:00 ON 03 MAR 2005

Copyright (c) 2005 The Thomson Corporation

FILE 'CAPLUS' ENTERED AT 11:23:00 ON 03 MAR 2005

USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.

PLEASE SEE "HELP USAGETERMS" FOR DETAILS.

COPYRIGHT (C) 2005 AMERICAN CHEMICAL SOCIETY (ACS)

FILE 'EMBASE' ENTERED AT 11:23:00 ON 03 MAR 2005

COPYRIGHT (C) 2005 Elsevier Inc. All rights reserved.

FILE 'WPIDS' ENTERED AT 11:23:00 ON 03 MAR 2005

COPYRIGHT (C) 2005 THE THOMSON CORPORATION

=> (absorb or absorbed or absorbing or absorption or immunoabsorb or immunoabsorbed or immunoabsorbing or immunoabsorption) and (?serum or ?sera)

L1 86474 (ABSORB OR ABSORBED OR ABSORBING OR ABSORPTION OR IMMUNOABSORB OR IMMUNOABSORBED OR IMMUNOABSORBING OR IMMUNOABSORPTION) AND (?SERUM OR ?SERA)

=> l1 and affinity and chromatograph?

L2 1112 L1 AND AFFINITY AND CHROMATOGRAPH?

=> l2 and phage and display

L3 1 L2 AND PHAGE AND DISPLAY

=> d ibib abs l2

L2 ANSWER 1 OF 1112 MEDLINE on STN

ACCESSION NUMBER: 2005016877 MEDLINE

DOCUMENT NUMBER: PubMed ID: 15494415

TITLE: Aminopeptidase N (CD13) is a molecular target of the cholesterol **absorption** inhibitor ezetimibe in the enterocyte brush border membrane.

AUTHOR: Kramer Werner; Girbig Frank; Corsiero Daniel; Pfenninger Anja; Frick Wendelin; Jahne Gerhard; Rhein Matthias; Wendler Wolfgang; Lottspeich Friedrich; Hochleitner Elisabeth O; Orso Evelyn; Schmitz Gerd

CORPORATE SOURCE: Aventis Pharma Deutschland GmbH, ein Unternehmen der sanofi-aventis-Gruppe, D-65926 Frankfurt am Main, Germany.. Werner.Kramer@aventis.com

SOURCE: Journal of biological chemistry, (2005 Jan 14) 280 (2) 1306-20. Electronic Publication: 2004-10-19. Journal code: 2985121R. ISSN: 0021-9258.

PUB. COUNTRY: United States  
 DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)  
 LANGUAGE: English  
 FILE SEGMENT: Priority Journals  
 ENTRY MONTH: 200502  
 ENTRY DATE: Entered STN: 20050112  
 Last Updated on STN: 20050301  
 Entered Medline: 20050225

AB Intestinal cholesterol **absorption** is an important regulator of **serum** cholesterol levels. Ezetimibe is a specific inhibitor of intestinal cholesterol **absorption** recently introduced into medical practice; its mechanism of action, however, is still unknown. Ezetimibe neither influences the release of cholesterol from mixed micelles in the gut lumen nor the transfer of cholesterol to the enterocyte brush border membrane. With membrane-impermeable Ezetimibe analogues we could demonstrate that binding of cholesterol **absorption** inhibitors to the brush border membrane of small intestinal enterocytes from the gut lumen is sufficient for inhibition of cholesterol **absorption**. A 145-kDa integral membrane protein was identified as the molecular target for cholesterol **absorption** inhibitors in the enterocyte brush border membrane by photoaffinity labeling with photoreactive Ezetimibe analogues (Kramer, W., Glombik, H., Petry, S., Heuer, H., Schafer, H. L., Wendler, W., Corsiero, D., Girbig, F., and Weyland, C. (2000) FEBS Lett. 487, 293-297). The 145-kDa Ezetimibe-binding protein was purified by three different methods and sequencing revealed its identity with the membrane-bound ectoenzyme aminopeptidase N ((alanyl)aminopeptidase; EC 3.4.11.2; APN; leukemia antigen CD13). The enzymatic activity of APN was not influenced by Ezetimibe (analogues). The uptake of cholesterol delivered by mixed micelles by confluent CaCo-2 cells was partially inhibited by Ezetimibe and nonabsorbable Ezetimibe analogues. Preincubation of confluent CaCo-2 cells with Ezetimibe led to a strong decrease of fluorescent APN staining with a monoclonal antibody in the plasma membrane. Independent on its enzymatic activity, aminopeptidase N is involved in endocytotic processes like the uptake of viruses. Our findings suggest that binding of Ezetimibe to APN from the lumen of the small intestine blocks endocytosis of cholesterol-rich membrane microdomains, thereby limiting intestinal cholesterol **absorption**.

=> d scan 12

L2 1112 ANSWERS BIOSIS COPYRIGHT (c) 2005 The Thomson Corporation on STN  
 TI Understanding the role of internal lysine residues of **serum**  
 albumins in conformational stability and bilirubin binding.

IT Methods & Equipment

HPLC: **chromatographic** techniques, purification method;  
 SDS-PAGE: analytical method, electrophoretic techniques; Shimadzu  
 spectrofluorometer: Shimadzu, equipment; **absorption**  
 spectroscopy: analytical method, spectroscopic techniques: CB; circular  
 dichroism: imaging method, spectroscopic techniques: CB; gel  
**chromatography**: purification method, size exclusion  
**chromatography**; gel filtration: filtration method, filtration  
 techniques

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):3

L2 1112 ANSWERS BIOSIS COPYRIGHT (c) 2005 The Thomson Corporation on STN  
 TI Polyclonal anti-idiotypes induce antibody responses protective against  
 ricin cytotoxicity.

IT Miscellaneous Descriptors

ANTINEOPLASTIC-DRUG; DNA SYNTHESIS; IMMUNOSUPPRESSANT-DRUG;

PHARMACODYNAMICS; SIGNAL TRANSDUCTION

L2 1112 ANSWERS BIOSIS COPYRIGHT (c) 2005 The Thomson Corporation on STN  
TI INTESTINAL **ABSORPTION** OF DIPEPTIDES AND BETA LACTAM ANTIBIOTICS  
II. PURIFICATION OF THE BINDING PROTEIN FOR DIPEPTIDES AND BETA LACTAM  
ANTIBIOTICS FROM RABBIT SMALL INTESTINAL BRUSH BORDER MEMBRANES.

IT Miscellaneous Descriptors  
CEPHALEXIN ENTEROCYTES **CHROMATOGRAPHY**

L2 1112 ANSWERS BIOSIS COPYRIGHT (c) 2005 The Thomson Corporation on STN  
TI RADIOIMMUNOASSAY OF NONENZYMATICALLY GLUCOSYLATED ALBUMIN.

IT Miscellaneous Descriptors  
GUINEA-PIG HUMAN **ANTISERUM**

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):4

L2 1112 ANSWERS BIOSIS COPYRIGHT (c) 2005 The Thomson Corporation on STN  
TI RAT ALPHA-1 MICROGLOBULIN PURIFICATION FROM URINE AND SYNTHESIS BY  
HEPATOCYTE MONOLAYERS.

IT Miscellaneous Descriptors  
HUMAN GUINEA-PIG IMMUNOLOGICAL CROSS-REACTIVITY

L2 1112 ANSWERS BIOSIS COPYRIGHT (c) 2005 The Thomson Corporation on STN  
TI HUMAN MACROPHAGES SYNTHESIZE AND SECRETE A MAJOR 95 KILODALTON GELATIN  
BINDING PROTEIN DISTINCT FROM FIBRONECTIN.

IT Miscellaneous Descriptors  
RABBIT U-937 LYMPHOMA MONOCYTIC CELL LINE 12-O TETRADECANOYL PHORBOL 13  
ACETATE HEMATOLOGIC-DRUG ARGININE TUMOR PROMOTING AGENT FUCOSE MANNOSE  
DIFFERENTIATION KINETICS

L2 1112 ANSWERS BIOSIS COPYRIGHT (c) 2005 The Thomson Corporation on STN  
TI ISOLATION AND SOME OF THE PHYSICOCHEMICAL AND IMMUNOLOGIC PROPERTIES OF A  
PLATELET ADHESION INHIBITOR FROM HUMAN **SERUM**.

IT Miscellaneous Descriptors  
RABBIT IMMUNO GLOBULIN G

L2 1112 ANSWERS BIOSIS COPYRIGHT (c) 2005 The Thomson Corporation on STN  
TI IMMUNO FLUORESCENT LOCALIZATION OF ENTERO KINASE IN HUMAN SMALL INTESTINE.

IT Miscellaneous Descriptors  
BLOOD GROUP O BIOPSY

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):end

=> d his

(FILE 'HOME' ENTERED AT 11:22:27 ON 03 MAR 2005)

FILE 'MEDLINE, BIOSIS, CAPLUS, EMBASE, WPIDS' ENTERED AT 11:23:00 ON 03  
MAR 2005

L1 86474 (ABSORB OR ABSORBED OR ABSORBING OR ABSORPTION OR IMMUNOABSORB  
L2 1112 L1 AND AFFINITY AND CHROMATOGRAPH?  
L3 1 L2 AND PHAGE AND DISPLAY

=> phage and display

L4 14147 PHAGE AND DISPLAY

=> affinity and chromatograph?

L5 134765 AFFINITY AND CHROMATOGRAPH?

=> 14 and 15

L6 473 L4 AND L5

=> ?serum or ?sera  
L7 2462683 ?SERUM OR ?SERA

=> 16 and 17  
L8 59 L6 AND L7

=> dup rem l8  
PROCESSING COMPLETED FOR L8  
L9 40 DUP REM L8 (19 DUPLICATES REMOVED)

=> t ti l9 1-40

L9 ANSWER 1 OF 40 MEDLINE on STN DUPLICATE 1  
TI Neutralizing chimeric mouse-human antibodies against Burkholderia  
pseudomallei protease: expression, purification and characterization.

L9 ANSWER 2 OF 40 EMBASE COPYRIGHT 2005 ELSEVIER INC. ALL RIGHTS RESERVED.  
on STN  
TI An alternating elution strategy for screening high **affinity**  
peptides from a **phage display** peptide library.

L9 ANSWER 3 OF 40 CAPLUS COPYRIGHT 2005 ACS on STN DUPLICATE 2  
TI Recombinant antibody fusion proteins specific to surface epitope of  
apoptotic cell for detecting and treating cells undergoing apoptosis

L9 ANSWER 4 OF 40 CAPLUS COPYRIGHT 2005 ACS on STN  
TI Improved methods for performing differential capture proteomics

L9 ANSWER 5 OF 40 CAPLUS COPYRIGHT 2005 ACS on STN  
TI Idiotypic mimics and anti-idiotypic antibodies for treatment of autoimmune  
disease

L9 ANSWER 6 OF 40 WPIDS COPYRIGHT 2005 THE THOMSON CORP on STN  
TI Generating a chimeric **serum** peptide (CSP) with a selected  
biological activity comprises providing a **display** library  
comprising a variegated population of test CSPs expressed on the surface  
of a population of **display** packages.

L9 ANSWER 7 OF 40 CAPLUS COPYRIGHT 2005 ACS on STN  
TI A method for identification of the peptides that bind to a clone of  
thyroid-stimulating antibodies in the **serum** of Graves' disease  
patients

L9 ANSWER 8 OF 40 MEDLINE on STN  
TI Specificity grafting of human antibody frameworks selected from a  
**phage display** library: generation of a highly stable  
humanized anti-CD22 single-chain Fv fragment.

L9 ANSWER 9 OF 40 MEDLINE on STN DUPLICATE 3  
TI Thyroglobulin-thyroperoxidase autoantibodies are polyreactive, not  
bispecific: analysis using human monoclonal autoantibodies.

L9 ANSWER 10 OF 40 MEDLINE on STN DUPLICATE 4  
TI **Phage display** for detection of biological threat  
agents.

L9 ANSWER 11 OF 40 CAPLUS COPYRIGHT 2005 ACS on STN  
TI Differential **phage** capture proteomics

L9 ANSWER 12 OF 40 CAPLUS COPYRIGHT 2005 ACS on STN  
TI Protein arrays comprising plural antibodies or fragments obtained from  
Camelidae for diagnosis

L9 ANSWER 13 OF 40 BIOSIS COPYRIGHT (c) 2005 The Thomson Corporation on STN  
 TI Albumin **affinity** tags increase peptide half-life in vivo.

L9 ANSWER 14 OF 40 MEDLINE on STN  
 TI Development of mammalian **serum** albumin **affinity** purification media by peptide **phage display**.

L9 ANSWER 15 OF 40 CAPLUS COPYRIGHT 2005 ACS on STN  
 TI Engineering **affinity** ligands for macromolecules

L9 ANSWER 16 OF 40 WPIDS COPYRIGHT 2005 THE THOMSON CORP on STN  
 TI New nucleic acid encoding a membrane type serine protease, useful for the diagnosis, prognosis and treatment of cancer, particularly metastatic cancers.

L9 ANSWER 17 OF 40 MEDLINE on STN DUPLICATE 5  
 TI Patient-tailored cloning of allergens by **phage display** : peanut (*Arachis hypogaea*) profilin, a food allergen derived from a rare mRNA.

L9 ANSWER 18 OF 40 EMBASE COPYRIGHT 2005 ELSEVIER INC. ALL RIGHTS RESERVED. on STN  
 TI Customized ligands optimize **affinity chromatography** procedures.

L9 ANSWER 19 OF 40 CAPLUS COPYRIGHT 2005 ACS on STN  
 TI Avidin derivatives conjugated with 4'-hydroxyazobenzene-2-carboxylic acids and uses thereof

L9 ANSWER 20 OF 40 CAPLUS COPYRIGHT 2005 ACS on STN  
 TI A method of **affinity** separation and immobilized ligands with modified asparagine residues for use therein

L9 ANSWER 21 OF 40 WPIDS COPYRIGHT 2005 THE THOMSON CORP on STN  
 TI Determination of transcobalamin II bound cobalamin in a body sample, comprises contacting cell free body fluid sample with immobilized specific binding ligand for transcobalamin II.

L9 ANSWER 22 OF 40 MEDLINE on STN  
 TI Identification of peptide motifs recognized by a human IgG autoanti-IgE antibody using a **phage display** library.

L9 ANSWER 23 OF 40 MEDLINE on STN  
 TI The interactions of peptides with the innate immune system studied with use of T7 **phage** peptide **display**.

L9 ANSWER 24 OF 40 EMBASE COPYRIGHT 2005 ELSEVIER INC. ALL RIGHTS RESERVED. on STN  
 TI Customized ligands optimize **affinity chromatography** procedures.

L9 ANSWER 25 OF 40 WPIDS COPYRIGHT 2005 THE THOMSON CORP on STN  
 TI New anti-complex antibody useful for diagnosing prostate cancer.

L9 ANSWER 26 OF 40 EMBASE COPYRIGHT 2005 ELSEVIER INC. ALL RIGHTS RESERVED. on STN  
 TI Humoral and cell-mediated autoimmune reactions to human acidic ribosomal P2 protein in individuals sensitized to *Aspergillus fumigatus* P2 protein.

L9 ANSWER 27 OF 40 EMBASE COPYRIGHT 2005 ELSEVIER INC. ALL RIGHTS RESERVED.

on STN

TI Selection of **phage**-displayed anti-guinea pig C5 or C5a antibodies and their application in xenotransplantation.

L9 ANSWER 28 OF 40 BIOSIS COPYRIGHT (c) 2005 The Thomson Corporation on STN

TI Actin surface structure revealed by antibody imprints: Evaluation of **phage-display** analysis of anti-actin antibodies.

L9 ANSWER 29 OF 40 BIOSIS COPYRIGHT (c) 2005 The Thomson Corporation on STN

TI Inhibition of expression of the Gal $\alpha$ 1-3Gal epitope on porcine cells using an intracellular single-chain antibody directed against  $\alpha$ 1,3Galactosyltransferase.

L9 ANSWER 30 OF 40 MEDLINE on STN

TI Staphylococcus aureus expresses a cell surface protein that binds both IgG and beta2-glycoprotein I.

L9 ANSWER 31 OF 40 CAPLUS COPYRIGHT 2005 ACS on STN

TI Determination and control of bimolecular interactions by using overlapping peptides for epitope mapping, vaccine discovery, drug design and diagnostic purposes

L9 ANSWER 32 OF 40 CAPLUS COPYRIGHT 2005 ACS on STN

TI Representations of bimolecular interactions by using **phage** libraries with selection markers

L9 ANSWER 33 OF 40 MEDLINE on STN DUPLICATE 6

TI Isolation of anti-glutathione antibodies from a **phage display** library.

L9 ANSWER 34 OF 40 MEDLINE on STN DUPLICATE 7

TI A system for stable indirect immobilization of multimeric recombinant proteins.

L9 ANSWER 35 OF 40 CAPLUS COPYRIGHT 2005 ACS on STN

TI Engineering **affinity** ligands for macromolecules

L9 ANSWER 36 OF 40 MEDLINE on STN DUPLICATE 8

TI Single-chain Fv fusion proteins suitable as coating and detecting reagents in a double antibody sandwich enzyme-linked immunosorbent assay.

L9 ANSWER 37 OF 40 BIOSIS COPYRIGHT (c) 2005 The Thomson Corporation on STN DUPLICATE 9

TI **Phage**-displayed La/SS-B antigen as a diagnostic reagent.

L9 ANSWER 38 OF 40 MEDLINE on STN DUPLICATE 10

TI Cloning and expression of human V-genes derived from **phage display** libraries as fully assembled human anti-TNF  $\alpha$  monoclonal antibodies.

L9 ANSWER 39 OF 40 MEDLINE on STN DUPLICATE 11

TI A combinatorial library of an  $\alpha$ -helical bacterial receptor domain.

L9 ANSWER 40 OF 40 CAPLUS COPYRIGHT 2005 ACS on STN

TI A family of vectors for surface **display** and production of antibodies

=> d ibib abs 19 2,4,6,7,16,18,22,39,40



L9 ANSWER 2 OF 40 EMBASE COPYRIGHT 2005 ELSEVIER INC. ALL RIGHTS RESERVED.  
on STN

ACCESSION NUMBER: 2004198169 EMBASE  
TITLE: An alternating elution strategy for screening high  
**affinity** peptides from a **phage**  
**display** peptide library.  
AUTHOR: Yu H.; Dong X.-Y.; Sun Y.  
CORPORATE SOURCE: Y. Sun, Dept. of Biochemical Engineering, Sch. of Chem.  
Eng. and Technology, Tianjin University, Tianjin 300072,  
China. ysun@tju.edu.cn  
SOURCE: Biochemical Engineering Journal, (2004) 18/3 (169-175).  
Refs: 21  
ISSN: 1369-703X CODEN: BEJOFV  
PUBLISHER IDENT.: S 1369-703X(03)00218-3  
COUNTRY: Netherlands  
DOCUMENT TYPE: Journal; Article  
FILE SEGMENT: 029 Clinical Biochemistry  
LANGUAGE: English  
SUMMARY LANGUAGE: English

AB An efficient procedure for the selection of high **affinity** clones  
from a heptapeptide **phage display** library was  
developed. Lysozyme was used as a model protein to demonstrate the  
selection strategy. Effect of bovine **serum** albumin (BSA)  
concentration on screening the **phage** library was discussed and  
proper BSA concentration on plate blocking was determined. The elution  
procedure was improved by alternatingly eluting the bound phages with  
glycine-HCl buffer (pH 2.2) and high-concentration target protein  
solution. The modified method was compared with others including the  
conventional protocol, and the results confirmed that the modified  
procedure could yield high **affinity** phages that might be lost by  
other screening methods. Through comparison of the DNA sequences of  
foreign peptides of the clones showing specificity to lysozyme molecules,  
the HWWW motif was found to be the necessary amino acid sequence for the  
**affinity**. The electrostatic and hydrophobic interactions are  
considered to contribute to the **affinity** for the protein.  
Moreover, protein **chromatography** with the immobilized HWWWPAS on  
Sephacrose gel indicated the strong binding **affinity** of the  
peptide for lysozyme. .COPYRGT. 2003 Elsevier B.V. All rights reserved.

L9 ANSWER 4 OF 40 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2004:3114 CAPLUS  
DOCUMENT NUMBER: 140:56053  
TITLE: Improved methods for performing differential capture  
proteomics  
INVENTOR(S): Stroobant, Paul; McBurney, Robert  
PATENT ASSIGNEE(S): USA  
SOURCE: PCT Int. Appl., 69 pp.  
CODEN: PIXXD2  
DOCUMENT TYPE: Patent  
LANGUAGE: English  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

| PATENT NO.    | KIND  | DATE     | APPLICATION NO. | DATE     |
|---------------|---|----------|-----------------|----------|
| WO 2004001377 | A2  | 20031231 | WO 2003-US19613 | 20030620 |
| WO 2004001377 | A3  | 20040722 |                 |          |
| W:            | AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,<br>CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,<br>GM, HR, HU, ID, IL, IN, IS, JP, KE, KP, KR, KZ, LC, LK, LR, LS,<br>LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG,<br>PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, |          |                 |          |

TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW  
 RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG  
 PRIORITY APPLN. INFO.: US 2002-390655P P 20020620  
 AB Disclosed herein are improved methods for identifying, isolating, and comparing proteins and other biomols. differing between two biol. samples using **affinity** chromatog. and **phage display** techniques.

L9 ANSWER 6 OF 40 WPIDS COPYRIGHT 2005 THE THOMSON CORP on STN  
 ACCESSION NUMBER: 2003-646058 [61] WPIDS  
 DOC. NO. CPI: C2003-176774  
 TITLE: Generating a chimeric **serum** peptide (CSP) with a selected biological activity comprises providing a **display** library comprising a variegated population of test CSPs expressed on the surface of a population of **display** packages.  
 DERWENT CLASS: B04 D16  
 INVENTOR(S): GYURIS, J; MORRIS, A J; WICK, S  
 PATENT ASSIGNEE(S): (GPCB-N) GPC BIOTECH INC  
 COUNTRY COUNT: 101  
 PATENT INFORMATION:

| PATENT NO   | KIND | DATE     | WEEK      | LA | PG  |
|---|------|----------|-----------|----|-----|
| WO 2003061596   | A2   | 20030731 | (200361)* | EN | 122 |
| RW: AT BE BG CH CY CZ DE DK EA EE ES FI FR GB GH GM GR HU IE IT KE LS LU MC MW MZ NL OA PT SD SE SI SK SL SZ TR TZ UG ZM ZW   |      |          |           |    |     |
| W: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK DM DZ EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ OM PH PL PT RO RU SD SE SG SK SL TJ TM TN TR TT TZ UA UG US UZ VC VN YU ZA ZM ZW |      |          |           |    |     |
| AU 2003222199   | A1   | 20030902 | (200422)  |    |     |

# APPLICATION DETAILS:

| PATENT NO     | KIND | APPLICATION    | DATE     |
|---------------|------|----------------|----------|
| WO 2003061596 | A2   | WO 2003-US2085 | 20030123 |
| AU 2003222199 | A1   | AU 2003-222199 | 20030123 |

# FILING DETAILS:

| PATENT NO     | KIND        | PATENT NO     |
|---------------|-------------|---------------|
| AU 2003222199 | A1 Based on | WO 2003061596 |

PRIORITY APPLN. INFO: US 2002-351225P 20020123  
 AN 2003-646058 [61] WPIDS  
 AB WO2003061596 A UPAB: 20030923  
 NOVELTY - Generating (M1) a chimeric **serum** peptide (CSP) with a selected biological activity comprising providing a **display** library comprising a variegated population of test CSPs expressed on the surface of a population of **display** packages, is new.  
 DETAILED DESCRIPTION - M1 comprises:  
 (a) providing a **display** library comprising a variegated population of test CSPs expressed on the surface of a population of **display** packages, each of which CSPs includes a **serum** protein sequence and at least one heterologous test peptide sequence that

is variegated in the library and that is provided at an N-terminal end, C-terminal end or internal site of the **serum** protein sequence;

(b) in a **display** mode, isolating, from the **display** library, a sub-population of **display** packages enriched for test CSPs, which have a desired binding specificity and/or **affinity** for a cell or its component;

(c) in a secretion mode, simultaneously expressing the enriched test CSP sub-population under conditions where the test CSPs are secreted and are free of the **display** packages;

(d) assessing the ability of the secreted test CSPs to regulate a selected biological activity in a target cell; and

(e) selecting a CSP possessing the ability to regulate the selected biological activity in the target cell.

INDEPENDENT CLAIMS are also included for:

(1) a **display** library enriched for test CSPs;

(2) a vector comprising a chimeric gene for chimeric CSP;

(3) a vector library comprising the vector;

(4) a cell composition comprising a population of cells containing the vector library; and

(5) identifying a peptide with a selected antimicrobial activity.

USE - M1 is useful for generating chimeric **serum** peptides with biological activity (claimed).

Dwg.0/22

L9 ANSWER 7 OF 40 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2003:314620 CAPLUS

DOCUMENT NUMBER: 140:57947

TITLE: A method for identification of the peptides that bind to a clone of thyroid-stimulating antibodies in the **serum** of Graves' disease patients

AUTHOR(S): Na, Chan Hyun; Lee, Mi Hwa; Cho, Bo Youn; Chae, Chi-Bom

CORPORATE SOURCE: Department of Life Science, Division of Molecular and Life Sciences, Pohang University of Science and Technology, Pohang, 790-784, S. Korea

SOURCE: Journal of Clinical Endocrinology and Metabolism (2003), 89(4), 1570-1576

CODEN: JCEMAZ; ISSN: 0021-972X

PUBLISHER: Endocrine Society

DOCUMENT TYPE: Journal

LANGUAGE: English

AB A method was developed for identification of the peptide sequences that bind to thyroid-stimulating antibody (TSAb) clones from **phage**-displayed peptide library. IgG (IgG) was purified from the **serum** of a Graves' disease patient that stimulates the synthesis of cAMP in the cells that express TSH receptor (TSHR). The IgG that binds to TSHR was purified by an **affinity** column packed with the resin cross-linked with the extracellular domain of human TSHR. The receptor-binding IgG was then mixed with phages that **display** linear or cyclic peptides at the end of tail protein pIII. The bound phages were eluted with acidic glycine after extensive washing. From sequencing of the pIII gene of the bound phages, one can deduce the sequences of the peptides that bind to the receptor-binding IgG. Each peptide sequence was then tested for inhibition of the synthesis of cAMP from thyroid cells induced by the **serum** of a Graves' patient. In this way, one can obtain the peptides that bind to a clone of TSAb. We obtained a peptide sequence that inhibits the action of TSAb at an extremely low concentration (<10<sup>-14</sup> M). Such a peptide will be useful for various studies on TSAb.

REFERENCE COUNT: 29 THERE ARE 29 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L9 ANSWER 16 OF 40 WPIDS COPYRIGHT 2005 THE THOMSON CORP on STN  
 ACCESSION NUMBER: 2001-245002 [25] WPIDS  
 DOC. NO. CPI: C2001-073571  
 TITLE: New nucleic acid encoding a membrane type serine  
 protease, useful for the diagnosis, prognosis and  
 treatment of cancer, particularly metastatic cancers.  
 DERWENT CLASS: B04 D16  
 INVENTOR(S): CRAIK, C S; SHUMAN, M; TAKEUCHI, T  
 PATENT ASSIGNEE(S): (REGC) UNIV CALIFORNIA  
 COUNTRY COUNT: 93  
 PATENT INFORMATION:

| PATENT NO   | KIND | DATE     | WEEK      | LA | PG |
|---|------|----------|-----------|----|----|
| WO 2001023524   | A2   | 20010405 | (200125)* | EN | 95 |
| RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW MZ<br>NL OA PT SD SE SL SZ TZ UG ZW  |      |          |           |    |    |
| W: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CR CU CZ DE DK DM<br>DZ EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC<br>LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD SE<br>SG SI SK SL TJ TM TR TT TZ UA UG UZ VN YU ZA ZW |      |          |           |    |    |
| AU 2000079913   | A    | 20010430 | (200142)  |    |    |

APPLICATION DETAILS:

| PATENT NO     | KIND | APPLICATION     | DATE     |
|---------------|------|-----------------|----------|
| WO 2001023524 | A2   | WO 2000-US27250 | 20001002 |
| AU 2000079913 | A    | AU 2000-79913   | 20001002 |

FILING DETAILS:

| PATENT NO     | KIND       | PATENT NO     |
|---------------|------------|---------------|
| AU 2000079913 | A Based on | WO 2001023524 |

PRIORITY APPLN. INFO: US 1999-410362 19990930

AN 2001-245002 [25] WPIDS

AB WO 200123524 A UPAB: 20010508

NOVELTY - An isolated nucleic acid (I) encoding a serine protease domain (II), is new.

DETAILED DESCRIPTION - An isolated nucleic acid (I) comprising:

(a) a nucleic acid (NA) encoding a serine protease domain with a fully defined sequence (S1) of 895 amino acids (aa);

(b) a NA encoding a serine protease domain with the aa sequence of 615-855 of S1;

(c) a NA that specifically hybridizes to a NA with a fully defined sequence (S2) of 3121 base pairs (bp) or its fragments under stringent conditions and is of sufficient length that it can indicate the presence or absence of a NA encoding a membrane type serine protease (MT-SP) in a total genomic DNA pool, a total cDNA pool or a total mRNA pool sample from a PC-3 cell;

(d) a NA with the same sequence as a NA amplified from a PC-3 cDNA template using polymerase chain reaction (PCR) primers corresponding to nucleotides 37-54 of S2 and 2604-2583 of S2's complement;

(e) a DNA encoding an mRNA that when reverse transcribed produces the cDNA of S2 or produces the cDNA encoding aa 615-855 of S1;

(f) a pair of primers that when used in a NA amplification reaction with PC-3 cDNA template specifically amplifies a NA encoding the polypeptide (PP) of S1;

(g) a pair of primers that when used in a NA amplification reaction with mRNA template from a PC-3 cell specifically amplify a NA encoding the

PP with the sequence of aa 615-855 of S1; and

(h) a NA encoding a MT-SP, which encodes a consensus sequence as defined in the specification and does not encode TRYB-human, ENTK-Human, HEPS-human, TRY2-Human and CTRB-human (all undefined).

INDEPENDENT CLAIMS are also included for the following:

(1) a PP:

(a) comprising a protease domain of S1;  
(b) comprising a PP of S1;  
(c) that has serine protease activity and is specifically bound by an antibody (Ab) raised against the PP of S1; and  
(d) having protease activity and is 95% or more identical to a PP with the sequence of (aa 615-855 of) S1;

(2) detecting (M1) a cancer in an organism comprising detecting the level of a MT-SP1 in a biological sample, where an elevated level of MT-SP1 as compared to the level of the protease in a biological sample from a normal healthy organism indicates the presence of the cancer;

(3) prescreening (M2) for a modulator of an MT-SP1 comprising contacting a NA encoding an MT-SP1 serine protease (protein) with a test agent and detecting specific binding of the test agent to the MT-SP1 protein or NA;

(4) an Ab (III) that binds specifically to MT-SP1;

(5) evaluating (M3) the severity or outcome of a cancer comprising measuring MT-SP1 in a biological sample from a cancer patient with at least a preliminary diagnosis of cancer and comparing the sample MT-SP1 level to the MT-SP1 level in normal healthy humans, where a sample MT-SP1 level in excess of MT-SP1 levels in normal healthy humans indicates a reduced survival expectancy compared to patients with normal MT-SP1 level;

(6) treating (M4) a cancer in a patient comprising carrying out M3 and selecting a patient identified with a MT-SP1 level in excess of MT-SP1 levels in normal healthy humans and providing an adjuvant therapy such as chemotherapy, radiation therapy, reoperation, antihormone therapy and immunotherapy;

(7) screening (M5) for recurrence of a cancer after removal of a primary tumor comprising measuring MT-SP1 in a biological sample from a cancer patient following removal of a primary tumor and comparing the sample MT-SP1 level to the MT-SP1 level in normal healthy humans, where a sample MT-SP1 level in excess of MT-SP1 levels in normal healthy humans indicates a possible recurrence of the cancer;

(8) monitoring (M6) effectiveness of cancer treatment in patients comprising measuring a level of MT-SP1 in a biological sample from a cancer patient during or after one or more treatments and comparing to the level of MT-SP1 in a biological sample taken from the patient prior to or following one or more cancer treatments, where a lower level of MT-SP1 in the second sample as compared to the MT-SP1 level in the first sample indicates efficacy in the one or more treatments;

(9) a chimeric molecule (IV) comprising an effector attached to (III); and

(10) specifically delivering (M7) an effector to a tumor cell expressing MT-SP1 comprising contacting the tumor with (IV).

ACTIVITY - Cytostatic. No supporting data is given.

MECHANISM OF ACTION - None given.

USE - MT-SP1 nucleic acids, polypeptides and antibodies are useful for the detection, evaluation of prognosis and/or screening for the recurrence of a cancer. (IV) is useful for the treatment of cancer by impairing the growth of tumor cells expressing MT-SP1 (claimed). A wide range of cancers can be diagnosed and/or treated such as gastric cancer, prostate cancer, cancers of the urinary tract, lung cancer, bronchus cancer, a colorectal cancer, breast cancer, pancreas cancer, brain or central nervous system cancer, peripheral nervous system cancer, esophageal cancer, cervical cancer, melanoma and kidney cancer etc. In particular it is suitable for metastatic cancers.

Dwg.0/6

L9 ANSWER 18 OF 40 EMBASE COPYRIGHT 2005 ELSEVIER INC. ALL RIGHTS RESERVED.  
on STN

ACCESSION NUMBER: 2001038452 EMBASE  
TITLE: Customized ligands optimize **affinity chromatography** procedures.  
AUTHOR: Larsson L.-J.  
CORPORATE SOURCE: L.-J. Larsson, 800 Centennial Avenue, PO Box 1327,  
Piscataway, NJ 08855, United States. lars-  
johan.larsson@am.apbiotech.com  
SOURCE: BioPharm, (2001) 14/1 (42-44).  
Refs: 1  
ISSN: 1040-8304 CODEN: BPRME5  
COUNTRY: United States  
DOCUMENT TYPE: Journal; General Review  
FILE SEGMENT: 005 General Pathology and Pathological Anatomy  
022 Human Genetics  
026 Immunology, Serology and Transplantation  
037 Drug Literature Index  
039 Pharmacy  
LANGUAGE: English  
SUMMARY LANGUAGE: English

AB An **affinity chromatography** ligand is selected or designed to bind specifically to a given target molecule, enhancing the capture of target molecules in purification. Customized **affinity** ligands have the potential to optimize protein purification procedures, offering increased product yield because of higher selectivity and efficient capture of the target molecules. By enhancing that efficiency, whole steps can be eliminated, saving time and costs incurred during purification.

L9 ANSWER 22 OF 40 MEDLINE on STN

ACCESSION NUMBER: 2000385107 MEDLINE  
DOCUMENT NUMBER: PubMed ID: 10848928  
TITLE: Identification of peptide motifs recognized by a human IgG autoanti-IgE antibody using a **phage display** library.  
AUTHOR: Shakib F; Hooi D S; Smith S J; Furmonaviciene R; Sewell H F  
CORPORATE SOURCE: Division of Molecular and Clinical Immunology, University of Nottingham, Faculty of Medicine & Health Sciences, Nottingham, NG7 2UH, United Kingdom.  
SOURCE: Clinical and experimental allergy : journal of the British Society for Allergy and Clinical Immunology, (2000 Jul) 30 (7) 1041-6.  
Journal code: 8906443. ISSN: 0954-7894.  
PUB. COUNTRY: ENGLAND: United Kingdom  
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)  
LANGUAGE: English  
FILE SEGMENT: Priority Journals  
ENTRY MONTH: 200008  
ENTRY DATE: Entered STN: 20000818  
Last Updated on STN: 20000818  
Entered Medline: 20000810

AB BACKGROUND: The potential of murine monoclonal anti-IgE antibodies as long-term therapy for atopic diseases will have to rely, for the time being, on passive antibody administration. There is therefore considerable interest in developing a peptide-based vaccine for active immunization to elicit long-term protective anti-IgE antibodies in the patient. It has been shown that some human IgG autoanti-IgE antibodies have the ability to partially block the binding of IgE to Fc receptors such as Fc epsilonRI. Therefore, the epitopes recognized by such antibodies could have vaccine potential. OBJECTIVE: To determine the

epitope specificity of one such human IgG anti-IgE antibody. METHODS: A 15-mer **phage**-peptide library was used to establish the epitope specificity of an IgG anti-IgE antibody isolated from the **serum** of an asthma patient. RESULTS: The SRPSP sequence, or part of it (i.e. RPS, RPSP, SPS or PSP), was present in all 18 **phage**-peptides that have been sequenced. This common motif was found to be within the human epsilon chain sequence Ser341-Thr355 near the N-terminus of the C epsilon3 domain. According to the human Fc epsilon model, the most accessible residues in this sequence are Arg342, Ile350, Arg351, Lys352 and Ser353. CONCLUSIONS: The present data should provide the molecular basis for the rational design of a suitable peptide immunogen (vaccine) for boosting the production of protective autoanti-IgE antibodies.

L9 ANSWER 39 OF 40 MEDLINE on STN DUPLICATE 11  
 ACCESSION NUMBER: 96081444 MEDLINE  
 DOCUMENT NUMBER: PubMed ID: 8532685  
 TITLE: A combinatorial library of an alpha-helical bacterial receptor domain.  
 AUTHOR: Nord K; Nilsson J; Nilsson B; Uhlen M; Nygren P A  
 CORPORATE SOURCE: Department of Biochemistry and Biotechnology, Royal Institute of Technology, Stockholm, Sweden.  
 SOURCE: Protein engineering, (1995 Jun) 8 (6) 601-8.  
 Journal code: 8801484. ISSN: 0269-2139.  
 PUB. COUNTRY: ENGLAND: United Kingdom  
 DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)  
 LANGUAGE: English  
 FILE SEGMENT: Priority Journals  
 ENTRY MONTH: 199602  
 ENTRY DATE: Entered STN: 19960220  
 Last Updated on STN: 19990129  
 Entered Medline: 19960201

AB The construction and characterization of a combinatorial library of a solvent-exposed surface of an alpha-helical domain derived from a bacterial receptor is described. Using a novel solid-phase approach, the library was assembled in a directed and successive manner utilizing single-stranded oligonucleotides containing multiple random substitutions for the variegated segments of the gene fragment. The simultaneous substitution of 13 residues to all 20 possible amino acids was carried out in a region spanning 81 nucleotides. The randomization was made in codons for amino acids that were modelled to be solvent accessible at a surface made up from two of the three alpha-helices of a monovalent Fc-binding domain of staphylococcal protein A. After cloning of the PCR-amplified library into a phagemid vector adapted for **phage display** of the mutants, DNA sequencing analysis suggested a random distribution of codons in the mutagenized positions. Four members of the library with multiple substitutions were produced in Escherichia coli as fusions to an albumin-binding **affinity** tag derived from streptococcal protein G. The fusion proteins were purified by human **serum** albumin **affinity chromatography** and subsequently characterized by SDS-electrophoresis, CD spectroscopy and biosensor analysis. The analyses showed that the mutant protein A derivatives could all be secreted as soluble full-length proteins. Furthermore, the CD analysis showed that all mutants, except one with a proline introduced into helix 2, have secondary structures in close agreement with the wild-type domain. These results proved that members of this alpha-helical receptor library with multiple substitutions in the solvent-exposed surface remain stable and soluble in E. coli. (ABSTRACT TRUNCATED AT 250 WORDS)

L9 ANSWER 40 OF 40 CAPLUS COPYRIGHT 2005 ACS on STN  
 ACCESSION NUMBER: 1993:596805 CAPLUS  
 DOCUMENT NUMBER: 119:196805  
 TITLE: A family of vectors for surface **display** and

production of antibodies  
AUTHOR(S): Duebel, S.; Breitling, F.; Fuchs, P.; Braunagel, M.;  
Klewinghaus, I.; Little, M.  
CORPORATE SOURCE: Div. Diagn. Exp. Ther., Ger. Cancer Res. Cent.,  
Heidelberg, D-6900, Germany  
SOURCE: Gene (1993), 128(1), 97-101  
CODEN: GENED6; ISSN: 0378-1119  
DOCUMENT TYPE: Journal  
LANGUAGE: English

AB Expression vectors for surface **display** and production of single-chain (Fv) antibodies (scAb) have been constructed based on the phagemid pSEX, which expresses DNA encoding a scAb fused to the gene III product of filamentous **phage** [Breitling et al., Gene 104 (1991) 147-153]. A smaller version of this phagemid, pSEX20, was made by removing an unnecessary cat. To produce a vector for the surface **display** of other proteins and peptides, the scAb of pSEX20 was substituted by a polycloning site (MCS) to give pSEX40. For the presentation of Ab on the surface of Escherichia coli, phagemid pAP10 was derived from pSEX20 by substituting gene III with a gene encoding the peptidoglycan-associated lipoprotein (PAL). Vectors for producing scAb than can be purified by antibody and metal **affinity** chromatog. were constructed by substituting gene III in the vector pSEX20 with DNA encoding a peptide with a C-terminal epitope recognized by a monoclonal antibody (phagemid pOPE40) or with five C-terminal histidines (pOPE90).

=> d his

(FILE 'HOME' ENTERED AT 11:22:27 ON 03 MAR 2005)

FILE 'MEDLINE, BIOSIS, CAPLUS, EMBASE, WPIDS' ENTERED AT 11:23:00 ON 03 MAR 2005

L1 86474 (ABSORB OR ABSORBED OR ABSORBING OR ABSORPTION OR IMMUNOABSORB  
L2 1112 L1 AND AFFINITY AND CHROMATOGRAPH?  
L3 1 L2 AND PHAGE AND DISPLAY  
L4 14147 PHAGE AND DISPLAY  
L5 134765 AFFINITY AND CHROMATOGRAPH?  
L6 473 L4 AND L5  
L7 2462683 ?SERUM OR ?SERA  
L8 59 L6 AND L7  
L9 40 DUP REM L8 (19 DUPLICATES REMOVED)

=> logoff hold

|  |            |         |
|--|------------|---------|
| COST IN U.S. DOLLARS                       | SINCE FILE | TOTAL   |
|  | ENTRY      | SESSION |
| FULL ESTIMATED COST                        | 101.18     | 101.39  |
| DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS) | SINCE FILE | TOTAL   |
|  | ENTRY      | SESSION |
| CA SUBSCRIBER PRICE                        | -2.19      | -2.19   |

SESSION WILL BE HELD FOR 60 MINUTES  
STN INTERNATIONAL SESSION SUSPENDED AT 11:40:20 ON 03 MAR 2005